

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

No claims are currently being cancelled.

Claims 5, 19 and 20 are currently being amended. The amendment to claim 5 is to correct an obvious typographical error, and the corrections to claims 19 and 20 are to remove the "means" language from those claims.

Claim 22 is currently being added.

This amendment adds a claim in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-22 are now pending in this application.

The following remarks are set forth in response to the Office Action dated August 12, 2003.

In the Office Action mailed August 12, 2003, claims 1, 2, 4, 10, 13-17, 19 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,351,465 to Han in view of U.S. Patent No. 5,996,021 to Civanlar, and claims 3, 5-9, 11, 12, 18 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Han and Civanlar in view of U.S. Patent No. 6,185,213 to Katsube. These rejections are traversed for at least the reasons given below.

First, with respect to independent claim 1, the Office Action incorrectly asserts that column 6, lines 1-8 and 26-35 and column 7, lines 1-7 of Han discloses selecting one router among a plurality of routers and setting up the cut-through path with one router as the next hop router. However, column 6, lines 1-8 and 26-35 of Han merely describes that there are four routers 42, 44, 46 and 48 connected to an ATM router 50, and that four cut-through paths 52,

54, 56 and 58 can be set up at the ATM router 50. Also, column 7, lines 1-7 of Han merely describes that the cut-through path is identified by the IP addresses and the Quality of Service (QOS) types and when a cut-through path is to be set up is determined by accounting for two parameters including the threshold number of received packets and the decrement per unit of time (the rate of arrivals). Han fails to disclose or suggest any selection of a next hop router.

The Office Action correctly recognizes that Han fails to disclose selecting one router among a plurality of routers so as to contribute a load balancing, but then the Office Action incorrectly asserts that column 9, lines 28-45 and 54-59 of Civanlar discloses these features.

However, column 9, lines 28-45 and 54-59 of Civanlar merely describes a routing of IP datagram at a IP relay switch (IPRS) using a forwarding table (routing table), to the least-cost paths to the next IPRS and the dynamic updating of the forwarding table. This portion of Civanlar has nothing at all to do with a load balancing among a plurality of other routers connected to a specific router. This portion of Civanlar also fails to disclose or suggest anything related to selecting a next hop router for the purpose of contributing to a load balancing among routers.

Thus, both Han and Civanlar fail to disclose or suggest anything corresponding to the claimed selecting step for selecting a next hop router so as to contribute to a load balancing, according to information regarding a state of cut-through path set up. Therefore, claim 1 is not obvious over the combined teachings of Han and Civanlar.

The same argument also holds for the dependent claims 2-9 as well as corresponding device and medium claims 14-16, 19 and 21.

Furthermore, dependent claims 2-9, 15, 16, and 21 are patentable for the specific features recited in those claims. For example, the Office Action asserts that column 10, lines 53-55 of Katsube teaches the features recited in claim 21. However, this assertion is incorrect. While column 10, lines 53-55

of Katsube describes that an upstream side node activates the set up of a cut-through path with respect to a downstream side, this teaching by itself does not teach or suggest the specific features of claim 21. As recited in claim 21, the selecting step selects one router according to a number of already set up cut-through paths that are used to route packets to a same destination node that is also included in a message for setting up the cut-through path that is received by the router device. The use of such a message for setting up a cut-through path, along with the particular information contained in that message, is not disclosed, taught or suggested by column 10, lines 53-55 of Katsube.

Next, with respect to independent claim 10, the Office Action incorrectly sets forth basically the same reasons as that set forth for claim 1.

However, please note that claim 10 significantly differs from claim 1 in that claim 10 requires selecting one cut-through path among a plurality of cut-through paths, and it requires changing a route or the selected cut-through path so as to contribute to the load balancing.

In this regard, column 6, lines 1-8 and 26-35 of Han, as cited in the Office Action, fail to disclose or suggest anything related to selecting a cut-through path and changing its route for the purpose of contributing to the load balancing (in fact, Han fails to disclose or suggest anything related to performing load balancing among routers). Also, column 9, lines 28-45 and 54-59 of Civanlar as cited in the Office Action fails to disclose or suggest anything related to selecting a cut-through path and changing its route for the purpose of contributing to the load balancing (in fact, Civanlar fails to disclose or suggest anything related to performing load balancing among routers).

Thus, the combined teachings of Han and Civanlar fail to disclose or suggest anything corresponding to the claimed selecting step for selecting a cut-through path and changing a route of that cut-through path so as to contribute to a load balancing. Therefore, claim 10 is not obvious over the combined teachings of Han and Civanlar.

The same argument also holds for the dependent claims 11-13 as well as corresponding device and medium claims 17-18 and 20.

In conclusion, since Katsube does not rectify the above-mentioned shortcomings of Han and Civanlar, it is believed that claims 1-21 are patentably distinct over the prior art of record.

New claim 22 has been added to recite additional features of the present invention that are not disclosed, taught or suggested by the cited art of record, alone or in combination. In particular, claim 22 recites that the control unit sends a message for setting up a cut-through path to one router, and makes an information setting necessary for utilizing the cut-through path when the cut-through path is set up.

Accordingly, since there are no other objections or rejections raised in the Office Action, Applicants believe that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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Date

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